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12-27-01

## RAW SEQUENCE LISTING

DATE: 08/29/2001

PATENT APPLICATION: US/09/426,783A

TIME: 14:04:07

Input Set : A:\C103031.app

Output Set: N:\CRF3\08292001\I426783A.raw

3 <110> APPLICANT: Gonsalves, Dennis  
4 Pang, Sheng-Zhi  
6 <120> TITLE OF INVENTION: TOSPOVIRUS RESISTANCE IN PLANTS  
8 <130> FILE REFERENCE: 19603/10303  
10 <140> CURRENT APPLICATION NUMBER: 09/426,783A  
11 <141> CURRENT FILING DATE: 1999-10-22  
13 <150> PRIOR APPLICATION NUMBER: 08/495,484  
14 <151> PRIOR FILING DATE: 1995-09-25  
16 <150> PRIOR APPLICATION NUMBER: PCT/US94/01046  
17 <151> PRIOR FILING DATE: 1994-01-27  
19 <150> PRIOR APPLICATION NUMBER: 08/010,410  
20 <151> PRIOR FILING DATE: 1993-01-29  
22 <160> NUMBER OF SEQ ID NOS: 35  
24 <170> SOFTWARE: PatentIn Ver. 2.1  
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32 <223> OTHER INFORMATION: Description of Artificial Sequence: probe  
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64 <220> FEATURE:  
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73 <212> TYPE: DNA

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74 &lt;213&gt; ORGANISM: Tomato spotted wilt virus

76 &lt;400&gt; SEQUENCE: 5

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78 gcagaaaaca acatcatgcc taactctcaa gcttccactg attctcattt caagctgagc 120
79 ctctggctaa gggttccaaa ggttttgaag cagggtttcca ttcagaaatt gttcaagggt 180
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110 ttctgatctt cctcaaaact aaggtctttg ccttggtgca acaaagcaac aatgctttcc 2040
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112 taactcaagg tgcgaaagtg caactctgta tcccgcagtc gtttcttagg ttcttaattg 2160
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116 &lt;210&gt; SEQ ID NO: 6

117 &lt;211&gt; LENGTH: 1709

118 &lt;212&gt; TYPE: DNA

119 &lt;213&gt; ORGANISM: Tomato spotted wilt virus

121 &lt;400&gt; SEQUENCE: 6

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123 tcaagctttt gtcaaagctt ctactgattc taatttcaag ctgagcctct ggctaagggt 120
124 tccaaagggt ttgaagcaga tttccattca gaaattgttc aaggttgacg gagatgaaac 180
125 aaataaaaca ttttatttat ctattgcctg cattccaaac cataacagtg ttgagacagc 240
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127 tgaattatca atgatgtttt ctgatttaaa ggagccttac aacattattc atgatccttc 360
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129 ttgcaacaac ttgcaagaag atgtgatcat ctacaccttg aacaaccatg agctaactcc 480
130 tggaaagtta gatttaggtg aaataacttt gaattacaat gaagacgcct acaaaaaggaa 540
131 atatttcctt tcaaaaacac ttgaatgtct tccatctaac atacaaacta tgtcttattt 600
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133 tccacaatct atttcagttg caaaatcttt gttaaactctt gatttaagcg ggattaaaaa 720
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136 tcattttctt caaatccctc ctgtctagta gaaaccataa aaacaaaaat aaaaataaaa 900
137 taaaatcaaa ataaaataaa aatcaaaaaa tgaaataaaa gcaacaaaaa aattaaaaaa 960
138 caaaaaacca aaaaagatcc cgaaaggaca attttggtcca aatttggggt ttgtttttgt 1020
139 tttttgtttt tttgtttttt gtttttattt ttatttttat ttttattttt attttatttt 1080
140 attttatgtt tttgttgttt ttgttatttt gttattttatt aagcacaaca cacagaaagc 1140
141 aaactttaat taaacacact tatttaaaat ttaacacact aagcaagcac aaacaataaa 1200
142 gataaagaaa gctttatata tttataggct tttttataat ttaacttaca gctgctttta 1260
143 agcaagttct gtgagttttg cctgtttttt aaccccaaac atttcataga acttggttaag 1320
144 ggtttcactg taatgttcca tagcaatact tccttttagca ttaggattgc tggagctaag 1380
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153 &lt;210&gt; SEQ ID NO: 7

154 &lt;211&gt; LENGTH: 260

155 &lt;212&gt; TYPE: PRT

156 &lt;213&gt; ORGANISM: Tomato spotted wilt virus

158 &lt;400&gt; SEQUENCE: 7

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159 Gln Val Glu Ser Asn Asn Arg Thr Val Asn Ser Leu Ala Val Lys Ser
160 1 5 10 15
162 Leu Leu Met Ser Ala Glu Asn Asn Ile Met Pro Asn Ser Gln Ala Ser
163 20 25 30
165 Thr Asp Ser His Phe Lys Leu Ser Leu Trp Leu Arg Val Pro Lys Val
166 35 40 45
168 Leu Lys Gln Val Ser Ile Gln Lys Leu Phe Lys Val Ala Gly Asp Glu
169 50 55 60
171 Thr Asn Lys Thr Phe Tyr Leu Ser Ile Ala Cys Ile Pro Asn His Asn
172 65 70 75 80
174 Ser Val Glu Thr Ala Leu Asn Ile Thr Val Ile Cys Lys His Gln Leu
175 85 90 95
177 Pro Ile Arg Lys Cys Lys Ala Pro Phe Glu Leu Ser Met Met Phe Ser
178 100 105 110
180 Asp Leu Lys Glu Pro Tyr Asn Ile Val His Asp Pro Ser Tyr Pro Lys
181 115 120 125
183 Gly Ser Val Pro Met Leu Trp Leu Glu Thr His Thr Ser Leu His Lys
184 130 135 140
186 Phe Phe Ala Thr Asn Leu Gln Glu Asp Val Ile Ile Tyr Thr Leu Asn
187 145 150 155 160

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189 Asn Leu Glu Leu Thr Pro Gly Lys Leu Asp Leu Gly Glu Arg Thr Leu
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192 Asn Tyr Ser Glu Asp Ala Tyr Lys Arg Lys Tyr Phe Leu Ser Lys Thr
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195 Leu Glu Cys Leu Pro Ser Asn Thr Gln Thr Met Ser Tyr Leu Asp Ser
196                195                200                205
198 Ile Gln Ile Pro Ser Trp Lys Ile Asp Phe Ala Arg Gly Glu Ile Lys
199                210                215                220
201 Ile Ser Pro Gln Ser Ile Ser Val Ala Lys Ser Leu Leu Lys Leu Asp
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214 <213> ORGANISM: Tomato spotted wilt virus
216 <400> SEQUENCE: 8
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219 aaccccaaac atttcataga acttggttaag ggtttcactg taatgttcca tagcaatact 180
220 tccttttagca ttaggattgc tggagctaag tatagcagca tactctttcc cttcttcac 240
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226 agtttcctca acaagcctga ccctgatcaa gctatcaagc cttctgaagg tcatgtcagt 600
227 ggctccaatc ctgtctgaag ttttctttat ggtaatttta ccaaaagtaa aatcgctttg 660
228 ctttaataacc ttcattatgc tctgaagatt cttcaggaat gtcagacatg aaataatgct 720
229 catctttttg atctggtcaa ggttttccag acaaaaagtc ttgaagttga atgctaccag 780
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242 tccaaagggt ttgaagcaga ttccattca gaaattgttc aagggtgcag gagatgaaac 180
243 aaataaaaca ttttatttat ctattgcttg cattccaaac cataacagtg ttgagacagc 240
244 tttaaacatt actgttattt gcaagcatca gctcccaatt cgtaaatgta aaactccttt 300
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253 gctttttcta attatgttat gtttattttc tttctttact tataattatt tttctgtttg 840
254 tcatttcctt caaattcctc ctgtctagta gaaaccataa aaacaaaaat aaaaataaaa 900
255 taaaatcaaa ataaaataaa aatcaaaaaa tgaaataaaa gcaacaaaaa aattaaaaaa 960
256 caaaaaacca aaaaagatcc cgaaaggaca attttggcca aatttggggt ttgtttttgt 1020
257 tttttgtttt tttgtttttt gtttttattt ttatttttat ttttattttt attttatttt 1080
258 attttatgtt tttgttgttt ttgttatttt gttattttatt aagcacaaca cacagaaagc 1140
259 aaactttaat taaacacact tatttaaaat ttaacacact aagcaagcac aaacaataaa 1200
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294 <223> OTHER INFORMATION: Description of Artificial Sequence: primer ✓
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305 <400> SEQUENCE: 12
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VERIFICATION SUMMARY

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